Please cancel claims 6, 7, 10, 11, and 14-16 without prejudice to subsequent revival.

1. (thrice amended) An isolated nucleic acid encoding a polypeptide monomer of a pH sensitive potassium channel, the monomer:

(i) forming a potassium channel having a unit conductance of approximately 80-120 pS and having increased potassium channel current activity above approximately intracellular pH of 7.1, when the monomer is expressed in a *Xenopus* oocyte; and

(ii) encoded by a nucleic acid that selectively hybridizes under moderate stringency hybridization conditions to a nucleic acid comprising a nucleotide sequence of SEQ ID NO:2, 16, or 18, wherein the hybridization reaction is incubated at 37°C in a solution comprising 40% formamide, 1 M NaCl, and 1% SDS and washed at 45°C in a solution comprising 1x SSC.

REMARKS

Claims 1, 4, 5, 8, 9, 26-27 and 45-48 are pending in the application. Claim 1 was amended. This amendment adds no new matter. Support for this amendment can be found, e.g., in the specification on page 24, lines 12-14. Claims 6, 7, 10, 11, and 14-16 were canceled without prejudice to subsequent revival. without prejudice to subsequent revival. Appendix A provides the "Version with markings to show changes made." All pending claims are provided in Appendix B for the Examiner's convenience.

Rejection under 35 U.S.C. § 101

Claims 1, 4, 5, 8, 9, 26-27 and 45-48 stand rejected for allegedly lacking utility because the claimed invention allegedly lacks a "substantial" or "real world" utility (Office Action, page 5). The Examiner asserts that the Applicants have not disclosed a